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(71) Applicant (for all designated States except US): VETIGEN [FR/FR]; 21, rue Sébastien Mercier, F-75015 Paris (FR).			
(72) Inventors; and			
(75) Inventors/Applicants (for US only): LENZEN, Gerlinde [DE/FR]; 55, rue des Cévennes, F-75015 Paris (FR). STROSBURG, Arthur, Donny [BE/FR]; 66, rue de Javel, F-75015 Paris (FR). SUGASAWA, Toshinari [JP/JP]; 9-12-507, Miyano-cho, Takatsuki-shi, Osaka 569 (JP). MOROOKA, Shigeaki [JP/JP]; 4-78, Nishi-3, Seiwadai, Kawanishi-shi, Hyogo 666-01 (JP).			
(74) Agent: CABINET ORES; 6, avenue de Messine, F-75008 Paris (FR).			
(54) Title: MAMMALIAN ICYP (IODOCYANOPINDOLOL) RECEPTOR AND ITS APPLICATIONS			
(57) Abstract <p>An isolated and substantially pure mammal polypeptide different from known adrenergic, serotonin and dopamine receptors, existing at least on mammalian muscle and eosinophils membranes, for instance in rat, guinea pig and humans. The invention also relates to plasmids containing the genes coding for said polypeptide, to host cells transformed by genes coding for the above mentioned polypeptide, to nucleotide probes capable of hybridizing with the genes coding for the above mentioned polypeptide, and to polyclonal and monoclonal antibodies directed against the above mentioned polypeptide. Said polypeptide is characterized in that it contains sites such that when said sites are exposed at the surface of a cell, they are able of binding iodocyanopindolol (ICYP) under blockage of α, β1, β2, β3-AR, serotonin 5-HT_{1A} and serotonin 5-HT_{1B} receptors, said binding being saturable, reversible, able to be displaced by a β-adrenergic receptor agonist SM-11044 with stereoselectivity but not by isoproterenol, norepi-nephine, epinephrine, serotonin, dopamine or BRL-37344, and not being blocked by propranolol, said polypeptide (1) having an apparent molecular weight of about 30-40 kDa when labeled with ¹²⁵I-iodocyanopindolol after photoaffinity labeling and separation by electrophoresis and an apparent molecular weight of about 60-80 kDa in Western blot, and (2) generating a fragment having the following formula DPX₁FFQHRIHX₂FSIFNX₃ by acidic cleavage, wherein X₁ represents S (SEQ ID NO.5) or X (SEQ ID NO.6), X₂ represents V (SEQ ID NO.6) or W (SEQ ID NO.5) and X₃ represents S (SEQ ID NO.5) or H (SEQ ID NO.6), said polypeptide being present at least on muscles and eosinophils membranes and being a non-adrenergic receptor.</p>			

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